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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,720	05/23/2001	Eric W. Nielsen	00-357	1496
7590	12/15/2004		EXAMINER	
W. Bryan McPherson III Caterpillar Inc. Intellectual Property Department, AB6490 100 N.E. Adams Street Peoria, IL 61629-6490			KE, PENG	
			ART UNIT	PAPER NUMBER
			2174	
			DATE MAILED: 12/15/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/863,720	NIELSEN ET AL.
	Examiner Peng Ke	Art Unit 2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 June 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 6/17/04.
2. Claims 1-24 are pending in this application. Claims 1, 10, 18, and 22 are independent claims. In the Amendment, filed on 6/17/04, claims 1, and 10 are amended.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 9-15, and 18-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan et al. (US 5,745,113) in view of Bhargava et al. (US 6,219,005).

As per claim 1, Jordan teaches a method of presenting a graphical user interface for a finite element analysis application on an electronic display device, comprising:

launching a parent graphics window on said electronic display device for displaying an image (col. 1, lines 45-65); and

wherein input window includes at least one of an interval count field indicative of a number of mesh entities (col. 12, lines 8-16), that will fill said selected entity, an interval size field indicative of a size of said mesh entities that will fill said selected entity (fig 2. item 36), an interval set field indicative of a circumstance under which said interval fields may be modified, a mesh scheme field indicative of a desired mesh scheme

and a smooth scheme field indicative of a process of improving said element quality after a mesh generation (Fig 2. item 32).

However Jordan fails to teach attaching a property input window to said parent graphics window for displaying and manipulating settings and attributes of an entity selected within said parent graphics window.

Bhargava et al. teaches attaching a property input window to said parent graphics window for displaying and manipulating settings and attributes of an entity selected within said parent graphics window. (col. 9, lines 1-20) It would have been obvious to an artisan at the time of the invention to include Bhargava et al.'s teaching with Jordan's method in order to provide two viewpoints of the same object at the same time.

As per claim 2, Jordan and Bhargava et al. teach the method of claim 1. Bhargava further teaches the method comprising attaching a task window to said parent graphics window for geometry creation, manipulation, and meshing of said entity within said parent graphics window, wherein a first interface element of said task window having a first tab identifier includes at least one of a first iconic button, adapted to providing creation capabilities of at least one of a vertex entity and curve entity and surface entity and volume entity and brick entity and sphere entity and cylinder entity and pyramid entity and torus entity and frustum entity, and a second iconic button adapted to providing modification capabilities of entities by at least one of webcutting and imprinting and cleaning and combining and boolean operations and healing and positioning and scaling and separating and splitting and copying and merging and tweaking (fig. 29 A, item 44, col. 6, lines 29-68).

As per claim 3, Jordan and Bhargava et al. teach the method of claim 1. Jordan further comprising attaching a textual input window to said parent graphics window wherein first interface element of said textual input window includes a command line for entry of textual commands for said finite element analysis application execution (fig. 2 item text).

As per claim 4, Jordan and Bhargava et al. teach the method of claim 1. Bhargava further teaches the method comprising attaching an entity tree window to said parent graphics window for displaying a graphical hierarchical representation of the parent child relationship of said entity selected within said graphics window or said entity tree window, wherein first interface element of said entity tree window includes parent and child entity names/IDs, M icons, and mesh status check boxes (fig 35. item 44, col. 6, lines 29-68).

As per claim 5, Jordan and Bhargava et al. teach the method of claim 1. Jordan further teaches the method comprising attaching a textual output window to said parent graphics window wherein first interface element of said textual output window includes an output line having textual feedback of activity executed by said finite element analysis application (col. 12, lines 1-25).

As per claim 6, Jordan and Bhargava et al. teach the method of claim 2. Jordan further teaches wherein said task window includes an advanced selection dialogue interface for selection of said entity in said graphics window that is particularly difficult to select yet is required for finite element analysis application execution and wherein said advanced selection dialogue interface includes a list box for displaying a current list of at least one said entity available for a particular FEA application command, and a required-

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entity field for displaying the number and type of said entity required for said finite element analysis application execution (col. 11, lines 54-col. 12, lines 8).

As per claim 9, Jordan and Bhargava et al. teach the method claims 1. Jordan further teaches the method is a computer-readable medium having computer-executable instructions for performing (col. 1, lines 44-64).

As per claim 10, it is rejected with the same rationale as claim 1. (see rejection above)

As per claim 11, which is dependent on claim 10, it is of the same scope as claim 2. (see rejection above)

As per claim 12, which is dependent on claim 10, it is of the same scope as claim 3. (see rejection above)

As per claim 13, which is dependent on claim 10, it is of the same scope as claim 4. (see rejection above)

As per claim 14, which is dependent on claim 10, it is of the same scope as claim 5. (see rejection above)

As per claim 15, which is dependent on claim 11, it is of the same scope as claim 6. (see rejection above)

As per claim 18, it is rejected with the same rationale as claim 1. (see rejection above)

As per claim 19, Jordan and Bhargava teach the method of claim 18. Bhargava teaches method further comprising alternating between said first interface element and said second interface element by selecting said first tab identifier and said second tab identifier, respectively (fig. 9, items 88, and 90).

As per claim 20, Jordan and Bhargava teach the method of claim 18. Bhargava teaches the method wherein said first tab identifier and said second tab identifier are oriented at bottom of said first interface element and said second interface element, respectively (fig. 9, items 88, and 90).

As per claim 21, which is dependent on claim 18, it is of the same scope as claim 9. (see rejection above)

As per claim 22, it is rejected with the same rationale as claim 1. (see rejection above)

As per claim 23, which is dependent on claim 22, it is of the same scope as claim 19. (see rejection above)

As per claim 24, which is dependent on claim 22, it is of the same scope as claim 20. (see rejection above)

Claims 7, 8, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jordan et al. (US 5,745,113) in view of Bhargava et al. (US 6,219,005) further in view of Schwalb (US 6,256,595).

As per claim 7, Jordan and Bhargava teach the method of claim 2. However they fail to teach the method comprising outputting a filter picking dialog interface window from said task window for filtering entities to parse out entities that match or do not match said entity characteristics, wherein said filter picking dialog interface window includes a filter-criteria field for including or excluding filtered entities and performing specified actions on said including or excluding filtered entities, and a register list box for listing at least one registered filter for limiting subsequent selection operations in said graphics window to those that meet said filter criteria.

Schwalb et al. teaches a method comprising outputting a filter picking dialog interface window from said task window for filtering entities to parse out entities that match or do not match said entity characteristics, wherein said filter picking dialog interface window includes a filter-criteria field for including or excluding filtered entities and performing specified actions on said including or excluding filtered entities, and a register list box for listing at least one registered filter for limiting subsequent selection operations in said graphics window to those that meet said filter criteria (col. 9, lines 1-19).

It would have been obvious to an artisan at the time of the invention to include Schwalb's teaching with method of Jordan and Bhargava in order to prevent certain entities or a dimension from becoming a target.

As per claim 8, Jordan, Bhargava, and Schwalb teach the method of claim 7. Schwalb further teaches wherein said registered filter is deactivated, so as to not limit said subsequent selection operations in said graphics window, while remaining a registered filter in said filter picking dialog interface window (col. 9, lines 1-19).

As per claim 16, which is dependent on claim 11, it is of the same scope as claim 7. (see rejection above)

As per claim 17, which is dependent on claim 11, it is of the same scope as claim 8. (see rejection above)

Response to Argument

Applicant's arguments with respect to claims 1-24 have been considered but are deemed to be moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peng Ke whose telephone number is (571) 272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peng Ke

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